

TSMC 98-262
Serial Number 09/325,951



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AMENDMENTS

In the Claims

Please amend Claims 1 and 6 as follows:

1. (AMENDED) A method for forming within a silicon semiconductor substrate employed within a microelectronics fabrication a silicon oxide dielectric layer comprising:

- providing a silicon semiconductor substrate;
- forming over the silicon semiconductor substrate a patterned silicon nitride mask layer; and
- oxidizing the silicon semiconductor substrate locally at a first oxidation temperature of at least above 1100 degrees centigrade through the silicon nitride mask pattern to form silicon oxide dielectric layers [] to prevent out-diffusion of nitrogen species and minimize formation of silicon oxynitride inclusions within the silicon oxide layers.

6. (AMENDED) A method for forming within a silicon semiconductor substrate employed within an integrated circuit microelectronics fabrication a silicon oxide dielectric field oxide (FOX) isolation layer comprising:

- providing a silicon semiconductor substrate;
- forming upon the silicon semiconductor substrate a silicon oxide pad oxide layer;
- forming upon the silicon oxide pad oxide layer a patterned silicon nitride mask layer;
- oxidizing the silicon substrate locally at a first temperature of at least above 1100 degrees centigrade through the patterned silicon nitride mask layer to form silicon oxide dielectric field oxide (FOX) isolation layers to prevent out-diffusion of nitrogen species

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and minimize formation of silicon oxynitride inclusions within the silicon oxide layers; and
oxidizing the silicon substrate further at a second temperature no greater than 1100
degrees centigrade.

Please withdraw Claims 2 and 7.